



# EPA's 33/50 Program Company Profile

## *Anchor Fence, Inc.*



## THE 33/50 PROGRAM

This Company Profile is part of a series of reports being developed by EPA to highlight the accomplishments of companies participating in the 33/50 Program. The 33/50 Program is an EPA voluntary pollution reduction initiative that promotes reductions in direct environmental releases and off-site transfers of 17 high-priority toxic chemicals. The program derives its name from its overall goals -- an interim goal of a 33% reduction by 1992 and an ultimate goal of a 50% reduction by 1995. The program uses 1988 Toxics Release Inventory (TRI) reporting as a baseline. In February, 1991, EPA began contacting the parent companies of TRI facilities that reported using 33/50 Program chemicals since 1988 to request their participation in the 33/50 Program. As of April, 1994, a total of 1,216 companies had elected to participate in the Program, pledging to reduce emissions of the 17 target chemicals by more than 355 million pounds by 1995. Companies are encouraged to set their own reduction targets, which may vary from the Program's national 33% and 50% reduction goals. Company commitments and reduction pledges continue to be received by EPA on a daily basis.

The 1992 TRI data revealed that releases and transfers of 33/50 Program chemicals declined by 40% between 1988 and 1992, surpassing the Program's 1992 interim reduction goal by more than 100 million pounds. This accomplishment, together with evidence from analysis of facilities' projected releases and transfers of the 17 priority chemicals, reported to TRI under the Pollution Prevention Act, offers strong encouragement that the 33/50 Program's ultimate goal of a 50% reduction by 1995 will be achieved.

EPA is committed to recognizing companies for their participation in the 33/50 Program and for the emissions reductions they achieve. The Program issues periodic Progress Reports, in which participating companies are listed and highlighted. In addition, Company Profiles, such as this one, are being prepared to provide more detailed information about companies that have written to EPA describing significant emissions reduction initiatives. Information presented in these profiles is drawn primarily from the company's written 33/50 Program communications and the annual TRI reports submitted by their facilities (including Pollution Prevention Act data reported to TRI in Section 8 of Form R). All company communications to EPA regarding the 33/50 Program are available to the public upon request.

EPA does not endorse the performance, worker safety, or environmental acceptability of any of the technical options discussed in this Profile. Mention of any product or procedure in this document is for informational purposes only, and does not constitute a recommendation of any such product or procedure, either express or implied, by EPA.

### 17 PRIORITY CHEMICALS TARGETED BY THE 33/50 PROGRAM

BENZENE  
CADMIUM & COMPOUNDS  
CARBON TETRACHLORIDE  
CHLOROFORM  
CHROMIUM & COMPOUNDS  
CYANIDES  
DICHLOROMETHANE\*  
LEAD & COMPOUNDS  
MERCURY & COMPOUNDS  
METHYL ETHYL KETONE  
METHYL ISOBUTYL KETONE  
NICKEL & COMPOUNDS  
TETRACHLOROETHYLENE  
TOLUENE  
1,1,1-TRICHLOROETHANE  
TRICHLOROETHYLENE  
XYLENES

\* Also referred to as methylene chloride

For information on the 33/50 Program, contact the TSCA Hotline at (202) 554-1404 or contact 33/50 Program staff directly by phone at (202) 260-6907 or by mail at Mail Code 7408, Office of Pollution Prevention and Toxics, U.S. EPA, 401 M Street, SW, Washington, D.C. 20460.

# Anchor Fence, Inc.

Anchor Fence, Inc. reduced releases of 33/50 Program chemicals by 87% from 1988 to 1992, and 98% by 1993, for a total reduction of over 120,000 pounds. This achievement exceeds the company's goal to the 33/50 Program of 93% by 1995.

## I. CORPORATE BACKGROUND

Anchor Fence, Inc. is a manufacturer of high quality chain link fencing systems, gates, and specialty fencing products. The company has one facility located in Baltimore, MD, employing approximately 85 workers.

One of the company's primary products is polyvinyl chloride (PVC) coated components for fences. The company purchases galvanized steel pipe, fittings, and wire, applies the coating, and delivers custom-made components and fencing systems. Prior to coating, the components are typically cleaned and covered with a water-based primer. A PVC powder coating is then bonded to the base material by heating the powder until it melts, and allowing it to cool and harden onto the base material.

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*Anchor Fence reduced releases of all 33/50 and TRI chemicals 98% from 1988 to 1993.*

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Between 1988 and 1991, the plant used only one 33/50 Program chemical in quantities reportable to TRI: methyl ethyl ketone. The company also uses six other 33/50 Program chemicals at levels below the TRI reporting threshold of 10,000 pounds: dichloromethane, lead and compounds, methyl isobutyl ketone, nickel and compounds, toluene, and xylenes. In addition, the company uses small quantities of zinc and compounds.

Methyl ethyl ketone was used as the primary solvent in primers used on pipes and fittings. Dichloromethane was used to strip PVC from off-quality products so that the pipes can be re-used. The other solvents primarily are used in routine cleaning operations and during product color changes. Metals such as lead, nickel, and zinc are used as colorants in the PVC coating process, and are by-products of the galvanized steel cleaning operations.

### Releases of TRI Chemicals Reported by Anchor Fence, Inc. (1000 pounds)

	1988	1992
<i>33/50 Program Chemicals</i>		
Dichloromethane*	7	7
Lead & Compounds*	tr	tr
Methyl Ethyl Ketone	115	*8
Methyl Isobutyl Ketone*	<1	<1
Nickel & Compounds*	tr	tr
Toluene*	<1	<1
Xylenes*	<1	<1
 33/50 Subtotal**	 123	 16
 <i>Other TRI Chemicals</i> (Zinc and Zinc Compounds)	 <1	 <1

\* Data from company progress reports

\*\* Columns do not sum to totals due to rounding.

tr = trace, less than one pound

Table I at the end of this profile shows the company's releases and transfers of chemicals reported to TRI between 1988 and 1992. Because most of the chemicals are used below TRI reporting thresholds, most of the data used in this profile were provided by the company in progress reports to the 33/50 Program. Anchor Fence reported a total of 122,987 pounds of 33/50 Program chemical releases in 1988. All of the releases were air emissions.

## II. 33/50 PROGRAM GOALS AND POLLUTION REDUCTION ACTIVITIES

The company joined the 33/50 Program in February of 1992 and committed to achieve a 93% reduction in total releases of all TRI chemicals by 1995 using 1988 TRI data as a baseline. Anchor Fence's 33/50 Program commitment translates to a reduction of 114,378 pounds of air releases from the 1988 baseline.

The company has undertaken the following activities to reduce releases of TRI chemicals:

- Releases of methyl ethyl ketone have been reduced 93% (113,000 pounds) through substi-

tution of water based formulations of primers for pipes and fittings. This action accounts for all of the observed decrease in releases of this chemical. In addition, all solvent based paint applications are being strictly monitored to determine which can be converted to water based products in the future.

- Improvements in the operation of the company's waste water treatment system have resulted in a 50% reduction in releases of lead, nickel, and zinc compounds between 1988 and 1992. These improvements consist primarily of adjusting the pH of the system to increase efficiency of metals removal.

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*Anchor Fence relies primarily on source reduction in its pollution reduction efforts. If prevention is not feasible, recycling and waste water treatment are also used.*

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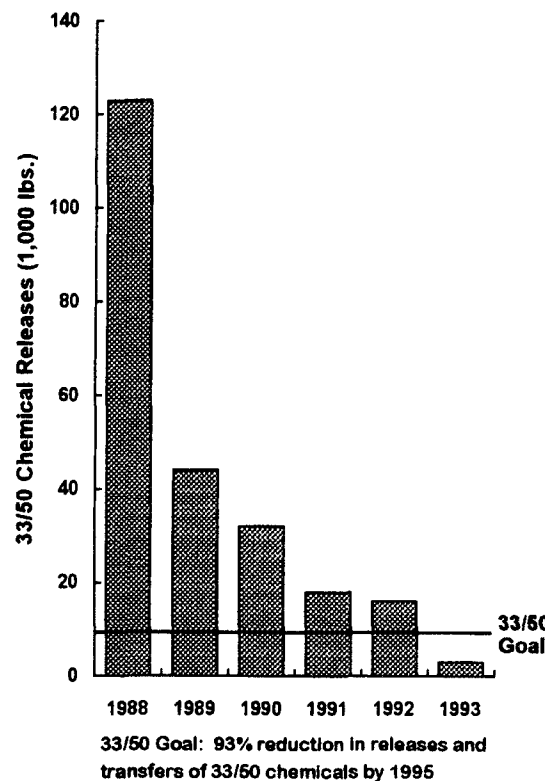
- Eliminating the use of dichloromethane at the plant by shifting the PVC stripping process for off-quality products to an off-site cleaning company that uses a hot salt bath PVC removal process. This change resulted in cost savings for the company.
- Examination of solvent based cleaning processes using toluene and methyl ethyl ketone to determine where solvent evaporation can be reduced. The company intends to install a water-cooled component cleaning tank to further reduce releases of the solvents.

### III. PROGRESS TOWARDS 33/50 REDUCTION GOALS

By 1992, Anchor Fence had reduced release of 33/50 Program chemicals by 87% from 1988 levels. Virtually all of this reduction was a result of substitution of methyl ethyl ketone-based primers with a water-based formulation.

According to company progress reports to the 33/50 Program, Anchor Fence has continued to reduce releases of all 33/50 chemicals. Total releases of TRI chemicals were approximately 2,800 pounds in 1993. This represents a reduction of over 120,000 pounds or 98%, exceeding the

**Anchor Fence's Progress Towards Meeting 33/50 Goals**



company's 33/50 Program goal of 93% by 1995. While most of the reductions were achieved prior to the company's commitment to the 33/50 Program, they have continued to significantly reduce releases since enrolling in the program, and are planning even further reductions by 1995.

### IV. SUMMARY OF ANCHOR FENCE'S EXPERIENCE

Anchor Fence's participation in the 33/50 Program has been outstanding. The company has reduced its releases of TRI chemicals by 98% by 1993 from 1988 levels through a variety of pollution prevention methods and activities. As a result, a reduction of over 120,000 pounds in TRI chemical releases has been achieved, and the company has exceeded its 1995 33/50 Program goal of a 93% reduction. As use of TRI chemicals has dropped below reporting thresholds, the company no longer reports to TRI.

Table I  
Anchor Fence Company  
TRI Releases and Transfers, 1988-1992  
(All data from TRI unless otherwise noted)

Chemical	Year	Total Air Emissions (pounds)	Transfers Off-site for Treatment/ Disposal/Other (pounds)	Total Releases and Transfers (1) (pounds)
Methyl ethyl ketone (only chemical reported to TRI)	1988	115,000	6,000	121,000
	1989	36,000	0	36,000
	1990	24,000	2,200	26,200
	1991	10,159	0	10,159
	1992 (2)	8,000	NR	8,000
	1993 (2)	2,000	NR	2,000
Percent Change, 1988-1992		-93%		-93%

Notes: (1) 1991 and 1992 Total Releases and Transfers do not include on- or off-site recycling or energy recovery.

(2) Data from company progress report to the 33/50 Program.

NR = not reported